



DEPARTMENT of ENVIRONMENT and NATURAL RESOURCES
Minerals & Mining Program - Oil & Gas Section
2050 West Main, Suite #1, Rapid City, SD 57702-2493
Telephone: 605-394-2229, FAX: 605-394-5317

FORM 2

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SEP 13 2004

DEPT OF ENVIRONMENT & NATURAL
RESOURCES - RCRO

APPLICATION FOR PERMIT TO DRILL

Type of work: Drill New Well <input checked="" type="checkbox"/> Reenter Well <input checked="" type="checkbox"/> Drill Directional Well <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> Other <u>HORIZONTAL RE-ENTRY</u>		Type of well: <input checked="" type="checkbox"/> Oil Well Gas Well Injection Other _____			
Name and Address of Operator: LUFF EXPLORATION COMPANY 1580 LINCOLN ST. SUITE 850 DENVER, CO		Telephone 303-861-2468			
Name and Address of Surface Owner: GILBERT CATTLE CO. HCR 63 BOX 20 LUDLOW, SD 57755					
Name and Address of Drilling Contractor and Rig Number: C&H WELL SERVICE, GILLETTE, WYO RIG 104					
Surface Location of well: Qtr-Qtr, Sec, Twp, Rge, County, feet from nearest lines of section, and latitude and longitude (if available): SENE SEC 22-23N-5E HARDING CO 660' FNL & 660' FEL					
If Directional, top of pay and bottom hole location from nearest lines of section: EST'D TOP OF PAY - 8972' TVD=9033' MD BHL 900' FNL & 1300' FWL OF SEC. 23					
Acres in Spacing (Drilling) Unit		Description of Spacing Unit			
841		ALL OF SEC. 22 & 23			
Well Name and Number		Elevation	Field and Pool, or Wildcat	Proposed Depth and Formation	
OTTERNESS 41-22		2942 GRD	HARDING SPRINGS	10,846MD= 8972TVD RED RIVER B	
Size of Hole	Size of Casing	Weight per Foot	Depth	Cementing Program (amount, type, additives)	Depth
1) 12 1/4	8 5/8	24	2526	1015 SX	SURF
2) 7 7/8	5 1/2	15.5,17,20	9220	1000 SX	2500'
3)					
4)					
Describe Proposed Operations (Clearly State all Pertinent Details, and Give Pertinent Dates, Including Estimated Date of Starting any Proposed Work). Use additional page(s) if appropriate. REMOVE EXISTING WHIPSTOCK. SET NEW WHIPSTOCK ON TOP OF CIBP AT 8875' AND MILL CASING WINDOW FROM 8852'-8858' WITH AZIMUTH OF APPROX. 98 DEG. DRILL AND LAND CURVE IN THE RED RIVER B ZONE AT 8972' TVD =9033' MD APPROX. 27' N & 166' E OF SURFACE LOCATION. DRILL HORIZONTAL LATERAL IN THE RED RIVER "B" ZONE TO A BHL 900' FNL & 1300' FWL OF SEC. 23. DIRECTIONAL DRILLING PLAN IS ATTACHED. THE DRILLING FLUID WILL BE FRESH WATER. ALL CUTTINGS AND FLUIDS WILL BE CONTAINED IN A SMALL LINED RESERVE PIT. PIT LINER WILL BE 12 MIL THICK. LIQUIDS WILL BE DISPOSED OF IN AN APPROVED SITE. CUTTINGS AND LINER WILL BE BURIED IN PLACE. COMPLETION WILL BE IN OPEN HOLE.					
I hereby certify that the foregoing as to any work or operation performed is a true and correct report of such work or operation. <div style="display: flex; justify-content: space-between;"><div>Signature: <u>Robert C. Arceneaux</u> Name (Print): Robert C. Arceneaux</div><div style="text-align: right;">SOUTH DAKOTA OPERATIONS DIVISION GEOLOGICAL SURVEY WESTERN FIELD OFFICE Date: <u>9-9-04</u></div></div>					

FOR OFFICE USE ONLY

Approved By: <u>[Signature]</u>	Title: <u>Oil & Gas Supervisor</u>
Permit No. <u>#1714</u>	Date Issued: <u>09/21/04</u>
API No. <u>40 063 20064.03</u>	
Conditions, if any, on attached page.	